What Is Claimed Is:

- 1. A device for determining at least one parameter of a medium flowing in a main direction of flow (18) in a line (3), especially for determining the air mass flow in the intake system of an internal combustion engine, having a part (6) which can be inserted into the line (3) with a predeterminable orientation in relation to the main direction of flow (18) in such a manner that a partial stream of the medium flowing in the line passes into an entry region (27) of a channel structure formed in the part, a measuring channel (40), provided with a measuring element (9) for determining the at least one parameter, branching off from the entry region (27) and the entry region (27) having a separation zone (28) which is separated from the measuring channel and has at least one separation aperture (33), which separation aperture opens into the line at a side wall (16) of the part, which side wall (16) extends substantially parallel to the main direction of flow (18), wherein the part (6) has at least one wind shield (50) which is disposed downstream of the at least one separation aperture (33) in the direction of the main direction of
- 2. The device as recited in Claim 1, wherein the wind shield (50) has, in a direction perpendicular to the main direction of flow (18) and parallel to the side wall (16) of the part, a lengthwise dimension L that corresponds to a multiple of the diameter of the separation aperture (33) and that preferably extends in that direction over approximately the entire length of the part (6) provided with the channel structure.

flow and which projects from the side wall (16) provided with the separation aperture.

- 3. The device as recited in Claim 1, wherein the wind shield (50) has a flat surface (51) facing toward the main direction of flow.
- 4. The device as recited in Claim 3, wherein the flat surface (51) forms with the side wall (16) provided with the separation aperture (33) an angle (α) that is greater than or equal to 90° and smaller than 160°.

- 5. The device as recited in Claim 1, wherein the distance (h) between the end of the wind shield (50) projecting from the side wall (16) and the side wall (16) provided with the separation aperture (33) is approximately from 0.5 to 5 millimeters.
- 6. The device as recited in Claim 2, wherein the at least one wind shield (50) is provided with openings (53).
- 7. The device as recited in Claim 6, wherein the openings (53) are made in the wind shield (50) in the form of notches.
- 8. The device as recited in Claim 2 or 6, wherein the at least one wind shield (50) has a comb-like structure of teeth (54) arranged side by side in a row, the width of a tooth being greater than the distance between two adjacent teeth.
- 9. The device as recited in any one of the preceding claims, wherein the wind shield (51) is disposed at the downstream end of the side wall (16) viewed in the main direction of flow (18).

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